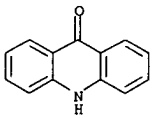
```
=> S "1-hydroxy-3-isopropoxy-7-methoxyacridone"/CN
L1            0 "1-HYDROXY-3-ISOPROPOXY-7-METHOXYACRIDONE"/CN

=> S "1-hydroxy-3-isopropoxy-7-methoxyacridin-9(10H)-one"/CN
L2            0 "1-HYDROXY-3-ISOPROPOXY-7-METHOXYACRIDIN-9(10H)-ONE"/CN

=> S acridone/CN
L3            1 ACRIDONE/CN

=> D L3 1

L3   ANSWER 1 OF 1  REGISTRY  COPYRIGHT 2006 ACS on STN
RN   578-95-0  REGISTRY
ED   Entered STN:  16 Nov 1984
CN   9(10H)-Acridinone (9CI)  (CA INDEX NAME)
OTHER CA INDEX NAMES:
CN   9-Acridanone (6CI, 8CI)
OTHER NAMES:
CN   9(10H)-Acridone
CN   9-Acridone
CN   Acridanone
CN   Acridin-9-one
CN   Acridine, 9,10-dihydro-9-oxo-
CN   Acridone
CN   CK 103
CN   CK 103 (heterocycle)
CN   NSC 408196
CN   NSC 7664
DR   790240-54-9
MF   C13 H9 N O
CI   COM
LC   STN Files:   AGRICOLA, ANABSTR, AQUIRE, BEILSTEIN*, BIOSIS, BIOTECHNO, CA,
       CAOLD, CAPLUS, CASREACT, CHEMCATS, CHEMINFORMRX, CHEMLIST, CIN, CSCHEM,
       DETHERM*, EMBASE, IFICDB, IFIPAT, IFIUDB, MEDLINE, MSDS-OHS, NAPRALERT,
       PIRA, RTECS*, SPECINFO, TOXCENTER, USPAT2, USPATFULL
         (*File contains numerically searchable property data)
     Other Sources:   EINECS**, NDSL**, TSCA**
         (**Enter CHEMLIST File for up-to-date regulatory information)
```



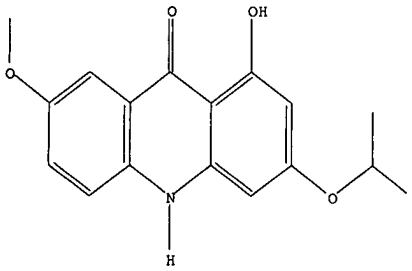

```
**PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT**

            763 REFERENCES IN FILE CA (1907 TO DATE)
            121 REFERENCES TO NON-SPECIFIC DERIVATIVES IN FILE CA
            765 REFERENCES IN FILE CAPLUS (1907 TO DATE)
             39 REFERENCES IN FILE CAOLD (PRIOR TO 1967)
```

=>
Uploading C:\Documents and Settings\dstitzel\My Documents\STN\10651876\acridone.str

L1 STRUCTURE UPLOADED

=> D L1
L1 HAS NO ANSWERS
L1 STR



Structure attributes must be viewed using STN Express query preparation.

=> S L1 SSS SAM
SAMPLE SEARCH INITIATED 15:16:09 FILE 'REGISTRY'
SAMPLE SCREEN SEARCH COMPLETED - 22 TO ITERATE

100.0% PROCESSED 22 ITERATIONS 0 ANSWERS
SEARCH TIME: 00.00.01

FULL FILE PROJECTIONS: ONLINE **COMPLETE**
BATCH **COMPLETE**
PROJECTED ITERATIONS: 159 TO 721
PROJECTED ANSWERS: 0 TO 0

L2 0 SEA SSS SAM L1

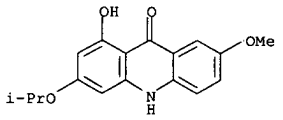
=> S L1 SSS FULL
FULL SEARCH INITIATED 15:16:21 FILE 'REGISTRY'
FULL SCREEN SEARCH COMPLETED - 508 TO ITERATE

100.0% PROCESSED 508 ITERATIONS 1 ANSWERS
SEARCH TIME: 00.00.01

L3 1 SEA SSS FUL L1

=> D L3 1

L3 ANSWER 1 OF 1 REGISTRY COPYRIGHT 2006 ACS on STN
RN 675141-08-9 REGISTRY
ED Entered STN: 14 Apr 2004
CN 9(10H)-Acridinone, 1-hydroxy-7-methoxy-3-(1-methylethoxy)- (9CI) (CA INDEX NAME)
MF C17 H17 N O4
SR CA
LC STN Files: CA, CAPLUS, CASREACT, USPATFULL



PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

2 REFERENCES IN FILE CA (1907 TO DATE)
2 REFERENCES IN FILE CAPLUS (1907 TO DATE)

=> FILE CAPLUS
COST IN U.S. DOLLARS SINCE FILE ENTRY 169.28 TOTAL SESSION 198.59

FULL ESTIMATED COST

FILE 'CAPLUS' ENTERED AT 15:16:56 ON 03 NOV 2006
USE IS SUBJECT TO THE TERMS OF YOUR STN CUSTOMER AGREEMENT.
PLEASE SEE "HELP USAGETERMS" FOR DETAILS.
COPYRIGHT (C) 2006 AMERICAN CHEMICAL SOCIETY (ACS)

FILE COVERS 1907 - 3 Nov 2006 VOL 145 ISS 20
FILE LAST UPDATED: 2 Nov 2006 (20061102/ED)

Effective October 17, 2005, revised CAS Information Use Policies apply.
They are available for your review at:

http://www.cas.org/infopolicy.html

=> S L3
L4 2 L3

=> D L4 1-2

L4 ANSWER 1 OF 2 CAPLUS COPYRIGHT 2006 ACS on STN
AN 2005:185388 CAPLUS
DN 142:280068
TI A preparation of acridone derivatives, useful as anti-herpes virus agents
IN Bastow, Kenneth F.; Lowden, Christopher T.
PA USA
SO U.S. Pat. Appl. Publ., 19 pp.
CODEN: USXXCO
DT Patent
LA English
FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	US 2005049273	A1	20050303	US 2003-651876	20030829

WO 2005023178 A2 20050317 WO 2004-US24837 20040803
WO 2005023178 A3 20050901
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW
RW: BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG
PRAI US 2003-651876 A 20030829
OS CASREACT 142:280068; MARPAT 142:280068

L4 ANSWER 2 OF 2 CAPLUS COPYRIGHT 2006 ACS on STN
AN 2003:625947 CAPLUS
DN 140:280725
TI Cell culture replication of herpes simplex virus and, or human cytomegalovirus is inhibited by 3,7-dialkoxylated, 1-hydroxyacridone derivatives
AU Lowden, C. T.; Bastow, K. F.
CS School of Pharmacy, Division of Medicinal Chemistry and Natural Products, University of North Carolina at Chapel Hill, Chapel Hill, NC, 27599, USA
SO Antiviral Research (2003), 59(3), 143-154
CODEN: ARSRDR; ISSN: 0166-3542
PB Elsevier Science B.V.
DT Journal
LA English
OS CASREACT 140:280725
RE.CNT 24 THERE ARE 24 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

=> FILE BIOSIS
COST IN U.S. DOLLARS

	SINCE FILE ENTRY	TOTAL SESSION
FULL ESTIMATED COST	2.74	201.33

FILE 'BIOSIS' ENTERED AT 15:17:37 ON 03 NOV 2006
Copyright (c) 2006 The Thomson Corporation

FILE COVERS 1969 TO DATE.
CAS REGISTRY NUMBERS AND CHEMICAL NAMES (CNs) PRESENT
FROM JANUARY 1969 TO DATE.

RECORDS LAST ADDED: 1 November 2006 (20061101/ED)

=> S L3
L5 0 L3

=> D HISTORY

(FILE 'REGISTRY' ENTERED AT 15:13:43 ON 03 NOV 2006)
DELETE HISTORY

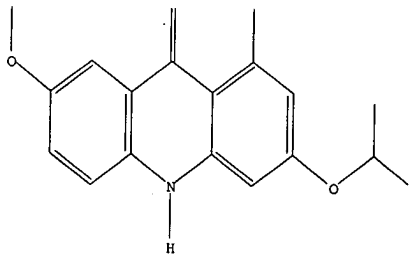
FILE 'REGISTRY' ENTERED AT 15:15:32 ON 03 NOV 2006
L1 STRUCTURE UPLOADED
L2 0 S L1 SSS SAM
L3 1 S L1 SSS FULL

FILE 'CAPLUS' ENTERED AT 15:16:56 ON 03 NOV 2006

L4 2 S L3

FILE 'BIOSIS' ENTERED AT 15:17:37 ON 03 NOV 2006
L5 0 S L3

=> D L1
L1 HAS NO ANSWERS
L1 STR

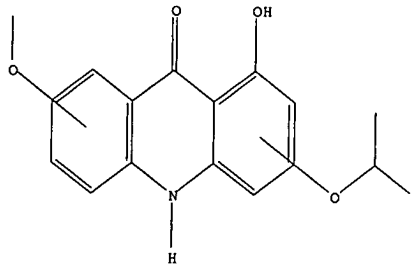


Structure attributes must be viewed using STN Express query preparation.

=>
Uploading C:\Documents and Settings\dstitzel\My Documents\STN\10651876\acridone derivative.str

L1 STRUCTURE UPLOADED

=> D L1
L1 HAS NO ANSWERS
L1 STR



Structure attributes must be viewed using STN Express query preparation.

=> S L1 SSS SAM
SAMPLE SEARCH INITIATED 15:20:17 FILE 'REGISTRY'
SAMPLE SCREEN SEARCH COMPLETED - 374 TO ITERATE

100.0% PROCESSED 374 ITERATIONS 0 ANSWERS
SEARCH TIME: 00.00.01

FULL FILE PROJECTIONS: ONLINE **COMPLETE**
BATCH **COMPLETE**
PROJECTED ITERATIONS: 6320 TO 8640
PROJECTED ANSWERS: 0 TO 0

L2 0 SEA SSS SAM L1

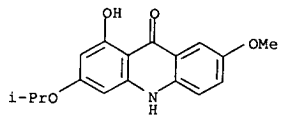
=> S L1 SSS FULL
FULL SEARCH INITIATED 15:20:26 FILE 'REGISTRY'
FULL SCREEN SEARCH COMPLETED - 7833 TO ITERATE

100.0% PROCESSED 7833 ITERATIONS 1 ANSWERS
SEARCH TIME: 00.00.01

L3 1 SEA SSS FUL L1

=> D L3 1

L3 ANSWER 1 OF 1 REGISTRY COPYRIGHT 2006 ACS on STN
RN 675141-08-9 REGISTRY
ED Entered STN: 14 Apr 2004
CN 9(10H)-Acridinone, 1-hydroxy-7-methoxy-3-(1-methylethoxy)- (9CI) (CA INDEX NAME)
MF C17 H17 N O4
SR CA
LC STN Files: CA, CAPLUS, CASREACT, USPATFULL



PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

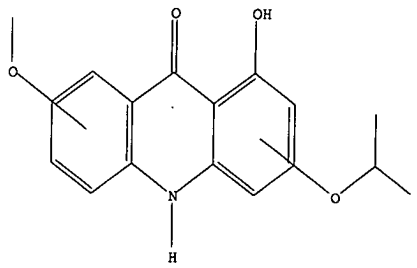
2 REFERENCES IN FILE CA (1907 TO DATE)
2 REFERENCES IN FILE CAPLUS (1907 TO DATE)

=> D HISTORY

(FILE 'BIOSIS' ENTERED AT 15:17:37 ON 03 NOV 2006)
DELETE HISTORY

FILE 'REGISTRY' ENTERED AT 15:19:13 ON 03 NOV 2006
L1 STRUCTURE UPLOADED
L2 0 S L1 SSS SAM
L3 1 S L1 SSS FULL

=> D L1
L1 HAS NO ANSWERS
L1 STR



Structure attributes must be viewed using STN Express query preparation.

L6 ANSWER 1 OF 1 DISSABS COPYRIGHT (C) 2006 ProQuest Information and Learning Company; All Rights Reserved on STN

ACCESSION NUMBER: 2001:62420 DISSABS Order Number: AAI3007835
TITLE: Antiviral acridones
AUTHOR: Lowden, Christopher Todd [Ph.D.]; Bastow, Kenneth [adviser]
CORPORATE SOURCE: The University of North Carolina at Chapel Hill (0153)
SOURCE: Dissertation Abstracts International, (2001) Vol. 62, No. 3B, p. 1398. Order No.: AAI3007835. 147 pages.
ISBN: 0-493-17353-6.
DOCUMENT TYPE: Dissertation
FILE SEGMENT: DAI
LANGUAGE: English

AB Human Cytomegalovirus (HCMV) and Herpes Simplex Type I Virus (HSV-1) are two herpes viruses that frequently arise as opportunistic infections in immuno-compromised individuals (Cavert, 1997). Many drug resistant strains of herpes viruses have been identified (Erice, A., 1999). Thus, it is important to identify and develop new lead molecules with antiherpes activity. 3,7-Dimethoxy-1-hydroxyacridone and 5-chloro-1,3-dihydroxyacridone have been found to be selective inhibitors of HCMV and HSV-1 replication, respectively, in in vitro tissue culture assays. The HSV-1 lead was discovered during a screen of 1,3-dihydroxyacridones that were previously synthesized for the purpose of investigating the structure activity relationships around mammalian topoisomerase II inhibition. The rationale behind the antiviral screening of these molecules was based on the fact that toposiomerase II is a cellular target that is required by viruses to carry out viral replication. Interestingly, 5-chloro-1,3-dihydroxyacridone was not an inhibitor of topoisomerase II. The results of the HSV-1 studies prompted a second screen for HCMV inhibition. The second screen identified 3,7-dimethoxy-1-hydroxyacridone as a highly selective and potent HCMV lead. Both lead molecules appear to represent novel structural and or mechanistic classes of antiviral agents. Studies have shown that the HSV-1 lead does not interfere with viral DNA replication, or viral late protein production/accumulation. It has been shown to interfere with the cleavage and packaging part of the viral life cycle in a dose dependent fashion (Akanitapichat, P., 1999). Preliminary experiments using the HCMV lead are indicative of a cellular target rather than a viral target. Series of analogs have been prepared for both lead molecules. The synthetic goal of the study was to investigate the SAR of both leads through an iterative process of analog synthesis and biological evaluation. A strategy of bioisosteric replacement, deletion, and modifications of key functional groups was utilized. In addition, some regioisomeric analogs were targeted. Solution phase parallel synthesis was also pursued as a means of analog preparation. Through this combination of traditional and modern medicinal chemistry techniques, several new active analogs of both the lead molecules were identified.

CC 0490 CHEMISTRY, ORGANIC; 0491 CHEMISTRY, PHARMACEUTICAL
TI Antiviral acridones